Distributed Generation

Why is the ARB focusing on distributed generation?

Distributed generation (DG) refers to electrical generation near the place of use. DG units can generate electricity using a variety of technologies—solar (photovoltaics); wind; fuel cells; diesel, natural gas, and gasoline powered engines; and microturbines. A DG unit is usually sized to meet the power needs of the business or residence at which it is located. Because some DG units are relatively small, some of California's 35 air pollution control districts (air districts) do not require that an air quality permit be obtained for this type of equipment.

What types of emissions are emitted from distributed generation?

DG units that generate power from the use of wind and solar do not emit air pollutants. DG units fired with fossil fuels emit the same pollutants as central station power plants, although at a somewhat higher level. These pollutants include oxides of nitrogen, particulate matter, volatile organic compounds, carbon monoxide, and oxides of sulfur.

What is the ARB doing to reduce public exposure to emissions from distributed generation?

The ARB is developing a regulation that would require manufacturers to obtain certification for DG equipment that is not required to obtain a permit from an air district. Only manufacturers of the cleanest DG will be certified by the ARB. In addition, the ARB is developing guidelines for the air districts to use to permit DG units that are required to obtain an air quality permit. Our guidelines will suggest that only the cleaner DG units be permitted by the Districts.

In addition to developing a certification program and guidelines that encourage the use of the cleanest DG technology, the ARB will be assisting in the efforts to assure that California has adequate supplies of electricity. As manufacturers receive certification for "clean DG", ARB will conduct outreach to potential purchasers and air districts.

For more information

Visit our web site at http://www.arb.ca.gov/energy/dg/dg.htm, for more information on distributed generation. You may also contact the ARB's Public Information Office at (916) 322-2990. You may obtain this document in an alternative format by contacting ARB's ADA Coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento area only); or (800) 700-8326 (TDD, outside Sacramento).

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our web site: www.arb.ca.gov.

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